Europe, China, and the Use of Standards as Trade Barriers:
How Should the U.S. Respond?

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Mr. Chairman, Ranking Member Wu, members of the Subcommittee, my name is Don Deutsch, and I am Vice President, Standards Strategy and Architecture at Oracle. For over 25 years I have chaired the INCITS H2 Technical Committee that defines the SQL language standard that all relational database system products, including Oracle's, support. I am responsible for orchestrating and coordinating my Company's participation in standards and consortia forums across all business units and geographies. In that capacity I represent Oracle at the policy level in various consortia as well as in formal standards bodies, including the INCITS Executive Board, the Executive Committee for the Java Community Process, and the American National Standards Institute (ANSI) Board of Directors. I also serve as President of the Enterprise Grid Alliance, a consortium focusing on accelerating the application of Grid technology in commercial and public sector data centers. In many respects the diversity of the bodies in which I participate is reflective of the nature of standards development in the technology industry.

I am honored to appear before this Subcommittee today in my capacity as Chairman of the Standardization Policy Committee for the Information Technology Industry Council. ITI is an elite group of the nation's top high-tech companies and is widely recognized as the tech industry's most effective lobbying organization in Washington. ITI helps member companies achieve their policy objectives through building relationships with Members of Congress, Administration officials, and foreign governments; organizing industry-wide consensus on policy issues; and working to enact tech-friendly government policies.

ITI would like to address three very important issues:

1. The Chinese and European approaches to standardization;
2. The US approach to standardization; and
3. The US Government's role in promoting the recognition of industry-led, voluntary standards, as well as in preventing standards from being used as barriers to market access.

ITI appreciates your focus on standards and their impact on the competitiveness of the US high-tech industry. Technology standards are directly and critically related to innovation and the creation of competitive global markets. Many of the most pressing policy issues before the Congress today have a significant standardization component, such as ensuring our

national security, improving access to and quality of medical care, and protecting the environment.

Background

Let me begin by emphasizing the critical importance of standards to the technology sector. Standards are at the foundation of the global information and communications technology (ICT) economy. They create value and aggregate markets. They facilitate technology diffusion, promote production efficiency, product compatibility, interoperability, and enhanced competition. They help drive down costs for consumers, facilitate communication among buyers and sellers of important commercial information. In many cases, they advance the public welfare, through the adoption of product safety standards, for example.

Industry recognizes that standards are not only the domain of the technical and business communities. Policy makers in the US and abroad are increasingly interested in and actively influencing a range of standards and technical regulatory issues. Governmental interest and activity plays a critical role in today's global economy and influences the competitiveness of the ICT industry. Representatives of the technology industry work very hard to carefully frame our discussions with policy makers as we work cooperatively to address critical standards policy matters and define appropriate roles. As important as these issues are, they are not simple. There is often a need for nuanced understanding of standardization policy issues as the objectives of different interests, both domestically and abroad, are not always aligned.

One way to help clarify matters is to explain what the high-tech industry means when we talk about "standards." In our sector, the majority of ICT standards are developed in a variety of open, international standards development processes and are adopted and implemented on a market-driven, voluntary basis. In few cases is the adoption of ICT standards mandated by governments.

Chinese and European Approaches to Standardization

China's approach to and use of standards is a complex set of issues. It is a well-publicized fact that the Chinese government wants to develop a robust domestic high-technology industry. This is not unique to China, as many governments around the world, including our own, want to see healthy and competitive domestic industries. The use and promotion of national or regional standards is one mechanism that some governments use to achieve their industrial policy objectives. Perhaps I can best illustrate this point with a recent experience that our industry had, one that we believe highlights many challenges the industry is facing, not only in China, but also around the globe.

The Chinese Government proposed the mandatory adoption of a Chinese-developed Wireless Local Area Network (WLAN) standard, best known by its acronym, "WAPI."

In May of 2003, The Chinese Government issued compulsory "WAPI" security standards that were set to go into effect on June 1, 2004, and were incompatible with the international

standards upon which most WLAN products are based. Moreover, China only provided the technology underlying this mandatory technical standard to several of its domestic producers of wireless equipment, and designated these companies as the obligatory production partners of any foreign manufacturers willing to license the mandated technology and seeking to market these products in China.

Thus, in order to comply with the proposed regulations, US technology companies faced a major dilemma: either collaborate with a select number of their Chinese competitors to co-produce products for the Chinese market, and thus potentially be forced to share valuable intellectual property with their Chinese competitors and run afoul of U.S. export control regulations, or abandon the Chinese market and its opportunities altogether.

These regulations also would have effectively excluded China from the world market because WLAN products made outside China would not have worked, essentially segmenting the world market for these products.

ITI worked very closely with our industry colleagues around the world, and also brought together the various groups in the US, to closely collaborate and maintain a strong industry voice on this issue. ITI worked hard to keep our government informed and to make sure this issue was on the agenda of both the Administration and the Congress. After considerable dialogue culminating in the April 2004 meeting of the Joint Commission on Commerce and Trade, the Chinese Government agreed to indefinitely suspend implementation of this mandatory standard, revise the standard based on comments from foreign and domestic firms, and participate in international standards bodies.

Yes, this was an important result for US industry, but it was an equally important precedent for global competition. ICT is a leading U.S. export to China, accounting for 26% of all US exports to China in 2002. This amounts to several billion dollars per year of US tech exports to China. Many of these current and as yet to be designed U.S.-made products and components would have been affected by this standard, jeopardizing high-end US jobs. By standing firm against WAPI, the US Government has ensured that the fast growing wireless market in China (forecast to grow by 25% per year) remains open to global competition. Additionally, the US high-tech industry avoided the precedent that would have encouraged China's bad behavior, and, potentially encouraged other countries that might choose to similarly discriminate against foreign firms through the standards process.

This example illustrates the concerns that many industrial sectors, particularly the US high-technology sector, are currently facing in China. The damaging precedent that could have been set with WAPI, in which a government -- a signatory to the WTO agreement -- mandates a technology and forces domestic production of that technology, would have had significant, negative implications for technological development and global economic growth.

I would like to shift now to Europe. As a global industry, the IT sector recognizes that the European standards infrastructure -- which includes the national and European standards organizations (ESOs) and the European Commission (EC) and member state governments -- is sophisticated, complex, and effective. The European standards infrastructure has demonstrated a considerable ability to set a single standard for the internal European market,

drive it through the ISO/IEC system and promulgate it globally by leveraging its market power and Commission-funded trade promotion efforts.

The impact of European standards activity reaches well beyond the EU. Many developing countries in Asia and the Americas look to Europe for leadership on standards and regulatory processes. For example, the European Commission funds, with more than 60m euro, an alliance for the Information Society with Latin America. This initiative includes a specific standards component, with the stated objective of promoting the European system of standardization and creating medium and long-term partnerships between the EU and Latin America. This is an explicit strategy targeted directly at our industry with the objective of extending European influence to the standards and regulatory bodies in third markets.

Let me briefly speak to one very costly example of this dynamic. It involves standards related to Electromagnetic Compatibility (EMC) for high-tech products.

In 1989, the European Commission issued the EMC Directive requiring that the electrical system in the EU be protected from unacceptable disruption from radio frequency and harmonic interference. The directive was based upon the precautionary principle. The resulting harmonic emissions standards have no technical justification. There is a complete absence of data demonstrating any widespread unacceptable levels of harmonic interference from consumer electronic products. As this standard is now implemented, it places the burden of mitigating a potential and undocumented EU electrical grid issue on manufacturers with no corresponding mitigation measures on the utility companies. The standards (EN 61000-3-2 and EN 61000-3-3) are overly restrictive, apply to every piece of equipment produced, and increase the consumer cost of products by over $1B annually in Europe.

Unfortunately, despite the lack of technical justification for this standard and the fact that it has been created under irregular procedures, we now see other countries, including China, Indonesia, India, Russia, and potentially others in Africa, Asia, and South America, considering the adoption of these standard. This is a concern to product manufacturers, and for an obvious reason: the growth of this standard will drive a significant increase in unwarranted additional costs and technical requirements for the impacted equipment.

ITI's view is that the objectives for technical regulations should be to ensure safe and legal products. Technical regulations should never be more trade-restrictive than necessary and governments should consider alternatives whenever possible. This one European example demonstrates the impact on the marketplace of technical regulations. Governments should reference standards as the basis for technical regulations under certain, limited circumstances. When standards are intended for use by governments in regulations, the content of the standard and the process for developing it are critically important. Governments should reference only those standards that meet the test of real usage (i.e. they are responsive to real world conditions, performance (not design) based, and technically sound and relevant to the regulation). Additionally, we believe governments should limit the use of standards in regulations to only those standards that are developed through a process that is truly open and global.

The U.S. Approach to Standardization

For our industry, the focus is not on how domestic standards are developed "in the US", but rather on creating global technical standards that support the growth of the worldwide ICT market. Because our industry designs and builds single products for a global market, we actually develop international, globally relevant standards in different venues and organizations around the world – not simply American National standards in a US standardization infrastructure. We need that flexibility, because the ICT sector depends on standards today more than ever. The rapid pace of change in our sector, with product cycles measured in months, not years, requires companies and their suppliers constantly to modify, improve, and re-develop their technologies, products, and services in order to satisfy worldwide consumer demands. Standards and their development process must stay relevant and keep pace with this fast changing, global marketplace.

That being said, of course it is a reality that governments do have a perspective on standardization. How governments act on that perspective can and does affect global commerce and competitiveness. I have spoken a bit already about perspectives and approaches in Europe and China. Now I would like to say a little bit about the situation here.

We believe that the growth and success of the global IT industry (much of which is based here in the US) is built in large part upon the development and use of market-led, voluntary standards that provide customer value and facilitate market development. Voluntary standards are completely market and consumer-driven. They are not mandated by government regulations, though public sector input as technical experts and consumers is valuable. In almost all circumstances, the development and use of voluntary standards are a key means to create and expand ICT markets and maximize benefits to societies, consumers, and companies. Industry responds to consumers as the ultimate arbiters when it is developing and using voluntary standards.

We firmly believe that a shared commitment in the US by industry, consumers, and government to this kind of voluntary and market driven approach to standardization benefits the entire marketplace by creating real customer value through consumer choice, lower costs, etc., and by facilitating market development by promoting innovation, product interoperability and the voluntary adoption of open industry standards.

We think this approach to standardization is clearly the optimal one. The success of the global IT industry demonstrates that. However, we do believe that this approach to standardization is not simple to explain, particularly in developing economies, where a more top-down and government-influenced approach is more readily understood and accepted. Explaining the strengths of our perspective and approach to standardization is a real challenge that we face in markets around the world.

The U.S. Government's Role

When asked what should be the role of the Federal Government in standardization, we are always very careful. We believe there is indeed a role. It is a limited and clearly defined role that is responsive to industry needs and performed in partnership with industry. It is an

increasingly important role. Specifically, we look to the US Government to perform two functions related to standardization - to promote the creation and use of voluntary, market-driven standards and to stimulate openness in trade and markets by helping to defend against the use of standards as barriers to innovation and market access.

We can point to important and useful examples of how the USG has effectively played that role. As we've seen with WAPI, positive results were achieved without the delays associated with the lengthy legal process of the WTO dispute settlement procedures. The well-executed cooperation and coordination at a variety of levels within and among US government agencies and the Congress was highly impressive and crucial to the success of this issue. We believe exactly this type of continued co-ordination will be necessary going forward. With WAPI, we may have struck at the symptoms, rather than the underlying cause itself, which means we could very well see similar attempts by China and other countries to utilize standards to force the creation of their own domestic industries, and we must be prepared, as industry and government, to address and resolve them.

We can also point to three specific initiatives that can help the U.S. Government to play that role -- two that exist to a degree and one that does not exist as yet. In 2002, ITI released its *Vision for Standards and Technical Regulations* and presented a *Recommended Standards Action Plan* to the Department of Commerce. I will talk first about the initiatives that were the focus of that Action Plan. The Commerce Department has taken some actions on these initiatives since 2002. We are now in the process of evaluating progress against that Action Plan and suggesting steps for the future.

In 2002, we recommended that the Commerce Department create a high-level standards and technical regulatory policy function to work with industry to identify and address both immediate and more long-term commercial policy issues in countries and regions around the world. The Commerce Department has taken steps through a Standards Liaison function to coordinate standards-related activity within the International Trade Administration and, to an extent, across the Department. The Department has worked to understand the global standards objectives of the IT industry and to assist, including by coordinating Commerce Department resources, in pursuing those objectives. Moving forward, we will recommend that the Department take additional steps to strengthen the Liaison function, including with additional staff and resources, in order to ensure the most effective standards, technical regulatory, and market access activity across all its agencies. ITI is committed to working with the Commerce Department to continue making progress in this area.

In our 2002 Standards Action Plan for the Commerce Department, we also recommended that it strengthen the existing Standards Attaché Program. In particular, we sought a program expansion to include attaches for China, the rest of Asia, and Geneva to supplement existing attaches in Brussels (to deal with European standards issues) and in Brazil. Because of the strategic utility of this program, we also recommended that the Commerce Department take necessary steps to ensure that it is both managed and located within the Department to retain an exclusive focus on standards and technical regulatory issues around the world. We are pleased to learn that we will likely see a standards attaché in China very soon. We appreciate the Department's efforts in making that happen. Moving forward, we would like to position the program for ongoing effectiveness, and we recommend that the Department support a formal assessment of the Attaché program's results, its training

program, location within the department, and budgetary needs. ITI is committed to working with the Commerce Department to continue making progress on these recommendations.

Finally, I would like to speak briefly about another potential activity for the USG and the Commerce Department that we believe is critically important moving forward and one that should be given serious consideration. In our 2002 Standards Action Plan for the Commerce Department, we recommended that it provide much-needed standards impact analysis. For example, there would be a real policy and commercial use for some analysis of key policy issues (e.g. defining what is the global economic impact of standards, developing a comparison of government support and promotion of standards, forecasting global standards participation trends, etc.). Related to this analysis, we also recommend that the Department create an early warning system to detect and alert industry to global standards and technical regulatory issues that could impact market access.

Since 2002, the Commerce Department has worked with ITI and others to create, on a pilot basis, an ICT Standards Dialogue between the U.S. Government and the European Commission (EC) as a form of "early warning system". The ICT industry has used this Dialogue to work with the Commerce Department (and other agencies) on important ICT accessibility standardization issues in Europe.

Moving forward, we think that that the Commerce Department can work with industry to continue strengthening and examining the pilot US-EU ICT Standards Dialogue. Additionally, we see today even more clearly than in 2002 a critical opportunity to support industry's standardization policy and market access objectives around the world by working with industry to develop a standards and market access research and analysis program to better understand the key issues that we have been discussing at this hearing today. The Commerce Department has existing staff expertise that could be valuable in designing and implementing this research and analysis program. ITI is committed to working with the Commerce Department to continue making progress on these recommendations.

Finally, Mr. Chairman, I would like to conclude by saying that from our various experiences with standards policy issues in markets around the world, we have learned that our industry needs to engage in an ongoing basis at the policy level directly with our government and other governments, particularly in emerging markets, about how technology and standards can help grow their economies and why it is in their interest to adopt and deploy internationally-recognized, voluntary, market-driven standards. We need to redouble our already considerable efforts promoting processes that support such standards since they address user needs and promote innovation and interoperability. We need to encourage market access so that consumers, industry, and economies around the world can benefit from innovative technological advancements.

Again, Mr. Chairman, members of the subcommittee, thank you for the opportunity to discuss these important issues with you today.